

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 65, 91, 105, 119

[Docket No. FAA-1999-5483; Notice No. 99-03]

RIN 2120-AG52

Parachute Operations

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This action proposes to amend the regulations applicable to parachute operations. The FAA proposes to define several new terms, to provide definitions for terms previously not defined, to clarify the current regulations, and to require that parachute operations be coordinated with the air traffic control facility having jurisdiction over the airspace in which the operations will be conducted. This action also proposes regulations to permit tandem parachute operations and allow non-U.S. certificated parachutists visiting from other countries to use equipment manufactured and packed in a foreign country when parachuting in the United States. In addition, the FAA proposes to remove the static-line assist device requirements for ram-air parachutes, and to add an accident reporting requirement. The FAA is proposing this action to enhance the safety of parachute operations in the National Airspace System (NAS).

DATES: Comments must be received on or before July 12, 1999.

ADDRESSES: Comments on this proposed rulemaking should be mailed or delivered, in duplicate, to the U.S. Department of Transportation (DOT) Dockets, Docket No. FAA-99-5483, 400 Seventh Street SW., Room Plaza 401, Washington, DC 20590. Comments also may be sent electronically to the following Internet address: 9-NPRM-CMTS@faa.gov. Comments may be filed and examined in Room Plaza 401 between 10:00 a.m. and 5:00 p.m. weekdays except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Ellen Crum, Airspace and Rules Division, ATA-400, Air Traffic Airspace Management Program, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267-8783; or Randy Montgomery, Flight Standards Service Division, AFS-340, General Aviation and Commercial Branch, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267-3155.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, federalism, or economic impact that might result from adopting the proposals in this notice also are invited. Substantive comments should be accompanied by cost

estimates. Comments must identify the regulatory docket or notice number and be submitted in duplicate to the Rules Docket address specified above.

All comments received, as well as a report summarizing each substantive public contact with FAA personnel on this rulemaking, will be filed in the docket. The docket is available for public inspection before and after the close of the comment period.

All comments received on or before the closing date will be considered by the Administrator before taking action on this proposed rulemaking. Late-filed comments will be considered to the extent practicable. The proposals contained in this notice may be changed in light of the comments received.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a pre-addressed, stamped postcard with those comments on which the following statement is made: "Comments to Docket No. FAA-1999-5483." The postcard will be date stamped and mailed to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-9680. Communications must identify the notice number or docket number of this NPRM.

Using a modem and suitable communications software, an electronic copy of this document may be downloaded from the FAA regulations section of the FedWorld electronic bulletin board service (telephone: (703) 321-3339) or the Federal Register's electronic bulletin board service (telephone: (202) 512-1661).

Internet users may reach the FAA's web page at <http://www.faa.gov> or the Federal Register's web page at http://www.access.gpo.gov/su_docs for access to recently published rulemaking documents.

Persons interested in being placed on the mailing list for future NPRMs should request from the above office a copy of Advisory Circular No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

Background

In 1991, the FAA reviewed part 105 and determined that revisions are necessary based on changes in the parachute industry and in parachute equipment since the rule was published in 1962. The changes in this proposed rule include: regulations to reflect current airspace reclassification, additional air traffic control communication requirements, improved parachute design, changes in industry practices, and clarification of existing regulations. The FAA believes that implementation of these changes would result in improved safety for parachute operations and other users of the NAS.

Discussion of the Proposal

Terminology

Part 105 currently is titled, "Parachute Jumping," and prescribes rules applicable to "parachute jumps." The FAA proposes to retitle part 105 "Parachute Operations" since this title better describes activities addressed by this part.

The FAA proposes to include a "definitions" section that would be numbered section 105.3. The definitions section would address three categories of terms: those that are used in the current part 105 but not defined, those terms previously defined but in need of further clarification, and those terms new to part 105.

There are several terms used in the current part 105, which are not defined, but are defined in this proposed rule. A definition for "main parachute" is provided to distinguish between it and the "reserve parachute." A definition for the term "pilot chute" is also proposed, which is defined as that part of a parachute system that initiates or accelerates the deployment of a parachute. Another term used in the current regulation but not defined is "drop zone." A "drop zone" would be defined as any predetermined area upon which parachutists or objects land after making an intentional parachute jump or drop.

In addition, part 105 contains terms that are defined but

require further clarification. To distinguish between a "parachute jump" and a "parachute drop," the FAA proposes to define "parachute jump" as a parachute operation that involves a person or persons, and "parachute drop" as a parachute operation that involves an object.

The term "reserve parachute" would replace the term "auxiliary parachute." A "reserve parachute" would be defined as an approved parachute worn for emergency use, activated only upon failure of the main parachute, or in any other emergency where use of the main parachute is impractical or would increase the risk of injury.

The FAA proposes to add new terms to part 105 as a result of changes in the parachute industry. The term "parachutist" would be included in the definition section and defined as a person who boards an aircraft with the intent to use a single-harness dual parachute system to descend to the surface.

The FAA also proposes to define the term "foreign parachutist." A foreign parachutist is a parachutist that is neither a U.S. citizen nor a resident alien.

The term "parachute operation" would be added and defined as any activity involving the use of a parachute for a controlled descent to the surface.

The FAA proposes to permit tandem parachute operations in the revised part 105. Currently, tandem parachute operations are permitted only by exemption and under certain conditions. This

proposal includes the definitions of four new terms related to tandem parachutes and tandem parachute operations. These terms are "parachutist in command," "passenger parachutist," "tandem parachute operation," and "tandem parachute system." A "parachutist in command" is the person responsible for the operation and safety of a tandem parachute operation before, during, and after a tandem parachute operation. The term "passenger parachutist" means a person who boards an aircraft, acting as other than the parachutist in command of a tandem parachute operation with the intent of exiting the aircraft while in flight using the forward harness of a dual harness tandem parachute system to descend to the surface. A "tandem parachute operation" is defined as a parachute operation in which more than one person uses the same tandem parachute system while descending to the surface from an aircraft in flight. A "tandem parachute system" is the combination of a main parachute, approved reserve parachute, an approved harness and dual parachute container, and a separate approved forward harness for a passenger parachutist.

To facilitate the proposed accident reporting requirements, the FAA proposes to add the terms "serious injury" and "fatal injury." The FAA proposes to use the same definitions for these two terms as used by the National Transportation Safety Board (NTSB). A "serious injury" means any injury that requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; results in a fracture of

any bone (except simple fractures of fingers, toes, or the nose); causes severe hemorrhages, or nerve, muscle, or tendon damage; or involves any internal organ. A "fatal injury" means any parachuting injury that results in death within 30 days from the date of the injury.

The FAA also proposes to add the term "supervision" in describing a certificated parachute rigger's responsibilities when a parachute is packed by a non-certificated person. The scope of supervision of a non-certificated person would be similar to the supervision requirements stated in 14 CFR §43.3(d), which states that a "supervisor personally observes the work being done to the extent necessary to ensure that it is being done properly and if the supervisor is readily available, in person, for consultation."

The FAA proposes to add and define the term "ram air parachute". When the current part 105 was issued, the parachutes in use were round. Since then, ram air parachutes, which are square or rectangular in shape, have been developed and are commonly used in the parachuting industry. Present regulations, which address round parachutes, do not address the unique operational characteristics of ram air parachutes, such as the steering capability. The addition of a definition for ram air parachutes incorporates the use of ram air parachutes in the current part 105.

The term "approved parachute" is currently used in the

regulations and its definition has been included in this proposal.

Radio Communications

Currently, section 105.14(a)(1)(ii) requires that an aircraft used for conducting parachute operations establish radio communications with the nearest FAA air traffic control facility or FAA flight service station at least 5 minutes before the jumping activity is to begin. The FAA proposes to change this communication requirement to require that radio communication be established with the air traffic control facility having jurisdiction over the airspace in which the parachute operation is conducted.

This proposal arises from the results of a FAA review of a selection of Aviation Safety Reporting (ASR) System reports filed with the National Aeronautics and Space Administration (NASA) between February 1992 and November, 1998. The FAA studied numerous ASR reports, in which pilots reported near midair collisions between their aircraft and aircraft involved in parachute operations. In addition, other reports involved aircraft flying in close proximity to parachutists who were descending to the ground near an airport or within controlled airspace.

The ASR reports are submitted voluntarily. According to NASA, the existence of reports concerning a specific topic in the

ASRS database cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System. However, these reports are often used by the FAA to provide further background information and insight into safety issues that are already being addressed by the FAA.

The ASR reports relate numerous incidents where aircraft on instrument flight plans were not provided with traffic advisories of parachute operations along their route of flight. In some cases, the air traffic controller was not in communication with the aircraft involved in parachute operations, and in other cases, not even aware the parachute activity was taking place. This proposal will ensure that aircraft involved in parachute operations are in communication with the appropriate ATC facility, thereby facilitating the exchange of traffic advisories, and reducing the risk of midair collisions between aircraft and persons conducting parachute operations.

In addition to enhancing safety, the proposed radio communication requirements would conform to annex 2 of the International Aviation Organization (ICAO), "Rules of the Air," chapter 3.1.6, "Parachute Descents." This annex states, "parachute descents, other than emergency descents, shall not be made except under conditions prescribed by the appropriate authority and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit."

Reporting and Notification Requirements

The FAA proposes to amend the reporting and notification requirements for individuals conducting parachute operations. Sections 105.19 and 105.23(a) respectively state that a parachute jump may not be made in certain designated airspace unless an authorization is obtained from, or notification is given to, the nearest FAA air traffic control facility (ATC) or FAA flight service station (FSS), as appropriate. Section 105.25(b) also requires that these facilities be notified if the parachute jumping activity is canceled or postponed.

Under the proposed rule, the air traffic control facility having jurisdiction over the affected airspace would be notified before conducting the parachute operation; notification to FAA flight service stations would no longer be required. The FAA believes that it is appropriate for facilities that have jurisdiction over the airspace in which the operations are taking place to be notified because flight service stations are not responsible for the separation of aircraft. Under the proposed rule, the facility receiving notification of parachute activity would be responsible for advising the FSS in order to disseminate this information to users of the NAS. The FAA believes that this requirement would encourage a dialogue between those engaged in parachute operations and ATC, particularly at locations where

parachute operations could potentially interfere with air traffic operations. The current provision that a pilot obtain prior approval from airport management to conduct parachute operations over or onto that airport remains unchanged.

This NPRM also includes a provision under proposed section 105.15 that each person submitting notification under 105.25(a)(3) specify the radio frequencies appropriate to the facilities to be used during the parachute operation, rather than the radio frequencies available in the aircraft.

Another proposed change to the notification procedures concerns air traffic control towers that are not operated by the U.S. Government (hereafter "non-federal tower"). The current section 105.17 permits parachute operations to be conducted at airports that have an operating, non-federal tower without prior coordination with that facility. The FAA has determined that to improve safety, pilots of aircraft conducting parachute operations should be required to contact the air traffic control tower having jurisdiction over the area where parachute operations will be conducted, regardless of who is responsible for tower operations. Therefore, the FAA proposes to require that pilots of aircraft conducting parachute operations over or onto an airport with an operating air traffic control tower establish and maintain two-way radio communication with, and obtain approval from, the air traffic control tower before conducting parachute operations at that airport.

Parachute packing

The FAA proposes to amend the regulations governing who is permitted to pack a parachute. Sections 65.111(b) and 105.43(a)(1) state that only a certificated parachute rigger or the person intending to jump using the parachute is authorized to pack a main parachute. Conversely, section 65.125 permits a current certificated senior or master parachute rigger (hereafter referred to as "certificated parachute rigger") to supervise other persons in packing any type of parachute for which that certificated parachute rigger is rated.

As a result of the inconsistency between the above sections of the regulations, the parachute industry has adopted a practice in which a certificated rigger regularly supervises other non-certificated persons packing main parachutes. This practice has become so widespread that an informal distinction between a "paid packer" and "rigger" exists, with the latter referring to a certificated rigger. The FAA has found that permitting a non-certificated person to pack a main parachute while supervised by a certificated rigger does not compromise safety. Therefore, for purposes of consistency, the FAA proposes to include provisions in sections 105.43(a) and 105.45(b)(1) to allow non-certificated persons to pack main parachutes when supervised by a certificated rigger.

The FAA proposes to clarify the meaning of the term "supervision," since there has been some industry confusion as to what constitutes appropriate supervision. Section 65.125 currently permits a certificated parachute rigger to supervise the packing of a parachute. In the proposed regulation, a certificated rigger must personally observe the entire packing process of the main parachute to ensure that it is being done properly by a non-certificated person who is not the holder of a parachute-rigging certificate. The certificated parachute rigger should be available for immediate consultation while the non-certificated parachute rigger is packing the main parachute. The certificated parachute rigger also should inspect the main parachute being packed, as necessary, through, and upon completion of the packing process. The only exception to this proposal would be if the person packing the main parachute is the parachutist in command and is making the next parachute jump with that parachute. These same requirements are proposed to apply to the packing of a tandem main parachute and will be discussed further.

Parachute operations between sunset and sunrise

The FAA proposes an addition to the current § 105.33 requirement that a parachutist must display a light, visible for 3 statute miles, from the time he or she exits the aircraft. The proposal also would require that a light be displayed that is visible for 3 statute miles in all directions. The FAA also

proposes that any object that is part of a parachute drop display a light visible for 3 statute miles in all directions from the time the object leaves the aircraft. This proposed requirement would conform to annex 2 of the ICAO "Rules of the Air," chapter 3.1.6, "Parachute Descents."

Accident Reporting Requirements

Presently, parachutists are not required to notify the FAA when involved in a parachuting accident. The majority of the information that the FAA has on parachute operations accidents is generally obtained as a result of a condition set forth in the grant of an exemption permitting tandem parachute operations. The National Transportation Safety Board (NTSB) has recommended that the FAA begin collecting information on parachute operations accidents. As a result of these recommendations, the FAA has decided to improve its existing accident database, which requires improving the collection process for this data. Once collected, this data would be used to assess the safety of parachute operations and prevent future accidents.

Consequently, the FAA is proposing that the parachutist involved in the accident, the pilot of the aircraft, or the drop zone owner or operator be required to notify the FAA of any serious or fatal injury to a parachutist while conducting a parachute operation.

Tandem Parachute Operations

When part 105 was originally issued, civilian parachute operations were limited to the use of a single-harness, dual-parachute pack. Since then, the parachute industry has developed new dual harness systems that support two people under a single parachute. Because part 105 allows parachute operations with single-harness parachutes only, the use of parachute equipment capable of supporting two people has only been authorized by exemption. For purposes of the exemptions, the FAA and the parachuting industry have adopted the term "tandem" to describe those parachute operations that use a dual-harness, dual-parachute system.

The first exemption authorizing tandem parachute operations in the United States was granted by the FAA in 1984. Since then, more than 2.5 million experimental tandem parachute jumps have been conducted throughout the world, including those operations conducted under exemption authority in the United States. Under the exemptions, various companies conducting tandem parachute operations were required to furnish the FAA with accident statistics on tandem operations, which provided the FAA with the means to evaluate the safety of tandem equipment compared to the safety of equipment and operations currently permitted under part 105.

In July 1997, the United States Parachute Association (USPA) submitted a petition for rulemaking requesting that the FAA amend section 105.43 to permit tandem parachute operations using an FAA-approved, dual-harness dual-parachute system capable of supporting two parachutists under a single canopy. While considering the USPA petition, the FAA reviewed accident statistics from 1991 through 1996. During this time period, approximately 16,990,000 total parachute operations were conducted, 670,707 of which were conducted using tandem parachutes. Of the total parachute operations, 194 resulted in fatalities due to equipment failure, 8 of which involved the use of tandem parachutes. The overall fatality rate for first-time skydivers involved in single-harness operations is 2.7 fatalities per 100,000 jumps. The overall fatality rate for first-time skydivers involved in tandem operations is lower, 1.2 fatalities per 100,000 jumps.

Based on the relatively low rate of fatalities that occurred during tandem operations as compared to those that occurred during single harness operations, the FAA has determined that the companies conducting experimental tandem parachute operations under an exemption from part 105 have demonstrated that tandem operations can be conducted safely. Accordingly, the FAA has concluded that tandem parachute operations should be permitted and it proposes to add section 105.45 to allow tandem parachute operations.

The proposed section 105.45 would permit tandem parachute operations under terms similar to the conditions and limitations previously contained in the exemption issued to experimental tandem parachute operators, which include: 1) requirements for instructor experience; 2) passenger briefings before boarding the aircraft used in the parachute operation; and 3) equipment inspection and packing. The FAA proposes to use the terms "passenger parachutist" and "parachutist in command" to replace "student" and "instructor," respectively, as used in the exemptions. In addition, the notification requirements for tandem parachute operations would be included in the general notification requirements of proposed section 105.13.

Specifically, the FAA proposes that the parachutist in command of a tandem parachute operation must provide documentation that the parachutist: (1) has a minimum of three years experience in parachuting; (2) has completed a minimum of 500 freefall parachute jumps, at least 300 of which were completed using a ram-air parachute; (3) holds an expert parachute license issued by an organization recognized by the FAA; (4) has successfully completed a tandem instructor course given by the manufacturer of the tandem equipment used in the parachute operation or a course acceptable to the Administrator; and (5) has been certified by the appropriate parachute manufacturer or tandem course provider as being properly trained on the use of the specific tandem parachute system to be used.

Additionally, the parachutist in command would be required to conduct briefings on tandem parachute operations for passenger parachutists before each flight and use the harness position prescribed by the manufacturer of the tandem parachute equipment.

Lastly, the FAA proposes to require that a certificated rigger supervise individuals packing parachutes to be used in tandem parachute operations, unless the person packing the parachute is the parachutist in command conducting the next parachute jump with that parachute in accordance with the proposed section 105.45.

Static-Line Assist Devices

The USPA submitted a second petition for rulemaking in July 1997 requesting that the FAA amend section 105.43 to permit parachute operations using static-line, direct-deployed, ram-air parachutes without using a static-line assist device.

Skydiving schools and parachute manufacturers have been concerned that a direct deployment assist device could cause canopy damage and malfunctions. Due to this concern, the USPA Safety & Training Committee and the Parachute Industry Association Technical Committee, conducted a series of tests to determine the effect of the required device in 1989. The tests showed that an assist device does not improve the reliability of the static line direct deployment of a ram-air canopy. The tests also show that there are no adverse effects when the device is removed. As a result of these tests, the FAA believes that

safety would not be compromised by removing the static-line assist device requirements for ram-air parachutes.

Equipment and Packing Requirements for Foreign Parachutists

The USPA submitted a third petition for rulemaking in July 1997 requesting that the FAA amend section 105.43 to allow foreign parachutists to make parachute jumps in the United States using their own equipment.

Section 105.43(a) currently states that no person may make a parachute jump wearing a single-harness, dual-parachute pack having at least one main parachute and one approved reserve parachute, unless the main parachute is packed by a certificated parachute rigger or by the person making the jump, within 120 days before the date of its use, and that the reserve parachute is packed by a U.S. certificated and appropriately rated parachute rigger. The requirements of section 105.43(a) were adopted to protect parachutists from inadequate equipment at a time when the sport parachute industry was in its infancy. Part 105 does not except foreign parachutists from the requirements imposed by section 105.43(a). Therefore, foreign parachutists making parachute jumps in the United States with their own equipment are still required to have an approved reserve

parachute, approved harness and dual-parachute container and have that reserve parachute packed by a U.S. certificated and appropriately rated parachute rigger.

As a result of this requirement, experienced foreign parachutists must have an exemption from section 105.43(a) in order to use their own parachute equipment while conducting parachute operations in the United States. Since 1972, the FAA has issued these exemptions to organizations sponsoring parachuting events attended by foreign parachutists and has found operations conducted under these exemptions have been conducted safely. Additionally, the FAA recognizes that the parachute equipment industry has become more sophisticated and safety conscious, and that foreign manufacturers of parachute equipment often meet U.S. standards. Therefore, the FAA proposes to add a new section 105.49 to address foreign parachutist equipment and parachute operations.

This proposed section incorporates the terms and conditions set forth in the grant of exemptions to allow these parachute jumps. The FAA proposes to permit foreign parachutists to conduct jumps in the U.S. using their own equipment provided that they use single-harness, dual-parachute systems which contain a non-Technical Standard Order (TSO) reserve parachute or a non-TSO'd harness and container. The parachute system used by the foreign parachutist must also meet the civil aviation authority requirements of the foreign parachutist's country, and must be

packed by the foreign parachutist making the next parachute jump with that parachute, or a U.S. certificated parachute rigger. These proposed requirements would conform to annex 2 of the ICAO, "Rules of the Air," chapter 3.1.6, "Parachute Descents."

Changes to Other Parts of 14 CFR

To conform the proposed rule language with the language of other pertinent parts of 14 CFR, the FAA proposes to amend sections of parts 65, 91, and 119 applicable to parachute operations.

Section-by-Section Discussion of the Proposals

The FAA has proposed several organizational changes to part 105. These changes are intended to organize the sections in a manner that first prescribes requirements that apply to most or all parachute operations, followed by sections that prescribe requirements for a specific type of parachute operation. A cross-reference table has been included to illustrate the proposed reorganization of part 105.

Section 65.111 Certificate required.

Currently, section 65.111(a) states that no person may pack, maintain, or alter any personnel-carrying parachute intended for emergency use in connection with civil aircraft of the United States (including the reserve parachute of a dual parachute system to be used for intentional parachute jumping) unless he holds an appropriate current certificate and type rating issued

under this subpart and complies with sections 65.127 through 65.133. The FAA proposes to revise paragraph (a) to change the word "auxiliary" to "reserve" and the reference to "he" to "that person."

Currently, section 65.111(b) states that no person may pack any main parachute of a dual-parachute pack unless that person has an appropriate current certificate or is the person making the jump using that parachute.

The FAA proposes to revise paragraph (b) to allow persons to pack a main parachute in accordance with section 105.43(a), under the supervision of a certificated parachute rigger or to allow a parachutist in command to pack a main parachute for tandem parachute operations in accordance with section 105.45(b)(1). The FAA proposes a word change to the provision that a person may pack a main parachute if that person intends to make the next parachute jump using that parachute.

Section 65.125 Certificates: Privileges.

The current section 65.125 permits a certificated parachute rigger to supervise other persons in the packing of any type of parachute for which the certificated parachute rigger is rated.

The FAA proposes to revise paragraphs 65.125(a)(2) and 65.125(b)(2) to permit that a certificated parachute rigger supervise other persons packing parachutes in accordance with section 105.43(a) or section 105.45(b)(1).

Section 91.307 Parachutes and parachuting.

The FAA proposes to revise paragraph (b) of this section by replacing "make" with "conduct," and "parachute jump" with "parachute operation." The term parachute operation includes parachute jump and parachute drop.

Section 105.1 Applicability.

This proposed section combines the requirements of current sections 105.1 General, Applicability and 105.11, Operating Rules, Applicability. There are no substantive changes in this section. The proposed section 105.1 prescribes rules governing parachute operations in the U.S. This part does not apply to parachute operations conducted during an in flight emergency or to meet an emergency on the surface when conducted at the direction or with the approval of an agency of the U.S., State, Puerto Rico, District of Columbia, possession of the U.S. or an agency or political subdivision thereof. This section retains the provision for excluding parachute operations by a member of an Armed Force from other sections of part 105 when the parachute operation is within a restricted area under the control of the Armed Force or during military operations in uncontrolled airspace.

Section 105.3 Definitions.

This proposed section would define the terms "approved parachute," "automatic activation device," "drop zone," "fatal injury," "foreign parachutist," "freefall," "main parachute,"

"object," "parachute drop," "parachute jump," "parachute operation," "parachutist," "parachutist in command," "passenger parachutist," "pilot chute," "ram-air parachute," "reserve parachute," "serious injury," "single-harness, dual-parachute system," "supervision," "tandem parachute operation," and "tandem parachute system."

Section 105.5 General

This proposed section is based on current section 105.13. The FAA proposes to replace the term "make" with the phrase "to conduct," the term "parachute jump" with the term "parachute operation," the term "made" with the term "conducted," and the term "jump" with the term "operation." There are no substantive changes to this section.

Section 105.7 Use of alcohol and drugs.

This proposed section is based on current section 105.35. The proposed rule would replace the term "liquor" with the term "alcohol" because alcohol is a more general term that includes liquor. The intent of the rule is to prevent a person under the influence of alcohol from conducting parachute operations.

Section 105.9 Inspections.

This proposed section includes requirements currently found in section 105.37 with no substantive changes.

Section 105.13 Radio equipment and use requirements.

This section is based on current section 105.14. As previously discussed, the FAA proposes to require radio

communications between the pilot of an aircraft involved in parachute operations in controlled airspace and the air traffic control facility having jurisdiction over the affected airspace.

Section 105.15 Information required and notice of cancellation or postponement of a parachute operation.

This proposed section is based on the current sections 105.15(c) and 105.25. Proposed paragraph (a)(8) of this section would require that each person requesting authorization under sections 105.21(b) and 105.25(a)(2) and each person submitting notification under section 105.25(a)(3) to specify the radio frequencies appropriate to the facilities to be used during the parachute operation, rather than the radio frequencies available in the aircraft. Proposed paragraph (b) retains the current requirement that each holder of a certificate of authorization issued under sections 105.21(b) and 105.25(b) of this part must present that certificate for inspection upon the request of the Administrator or any Federal, State, or local official. Proposed paragraph (c) would require the pilot in command of an aircraft involved in parachute operations to promptly notify the air traffic control facility having jurisdiction over the affected airspace if the proposed or scheduled parachute operation is canceled or postponed.

Section 105.17 Flight visibility and clearance from cloud requirements.

This proposed section contains the flight visibility and clearance from cloud requirements currently found in section 105.29. No changes are proposed to the current requirements.

Section 105.19 Parachute operations between sunset and sunrise.

Currently, section 105.33 requires persons making parachute jumps between sunset and sunrise to be equipped with a light that is displayed and visible for 3 miles from the time that person exits the aircraft until that person reaches the surface. Proposed section 105.19 would add to the above provision that the displayed light must be visible for 3 statute miles in all directions.

This proposed section would also allow objects equipped with a light to descend from an aircraft in flight between sunset and sunrise. Each object that is dropped from an aircraft must display a light that is visible for 3 statute miles in all directions from the time the object is dropped from the aircraft until the object reaches the surface.

Section 105.21 Parachute operations over or into a congested area or an open air assembly of persons.

This proposed section contains provisions currently found in section 105.15 and contains one change. The FAA proposes to remove the 4-day requirement to apply for a certificate of authorization since the administrative time necessary to process such requests has been reduced.

Section 105.23 Parachute operations over or onto airports.

This proposed section is based on the current section 105.17. As previously discussed, for airports with an operating control tower, proposed paragraph (a) of this section would require: (1) prior approval from both the airport management and the control tower to conduct parachute operations over or onto the airport; and (2) pilots of aircraft involved in parachute operations over or onto an airport with an operating airport traffic control tower (hereafter referred to as "control tower") to establish two-way radio communication with the control tower regardless of whether the control tower is operated by the United States or another entity.

For airports without a control tower, the proposed rule would retain the requirement that pilots of aircraft involved in parachute operations obtain prior approval from management of the airport to conduct parachute operations over or onto that airport.

Proposed section 105.23 would retain the provision currently found in section 105.17 which allows a parachutist to drift 2,000 feet above an airport's traffic pattern with a fully deployed and properly functioning parachute.

Section 105.25 Parachute operations in designated airspace.

This proposed section contains provisions currently found in sections 105.19, 105.23, and 105.27. Proposed paragraph (a)(1) would retain the provisions currently in section 105.27 for

parachute operations in restricted or prohibited airspace.

Proposed paragraph (a)(2) of this section addresses parachute operations in Class A, B, C, and D airspace areas, which are found currently in section 105.19. Proposed paragraph (a)(3) of this section is based on current section 105.23 and would use the Class E and G airspace area designations instead of the phrase "other airspace" as currently used in section 105.23. There are no substantive changes to this section.

Section 105.27 Accident reporting requirements.

This section would require the parachutist, the pilot of the aircraft, or the drop zone owner or operator to notify the FAA within 48 hours of any parachute operation resulting in a serious or fatal injury to the parachutist.

Section 105.41 Applicability.

This section has been amended to read, "this subpart prescribes rules governing parachute equipment used in civil parachute operations."

Section 105.43 Use of single-harness, dual-parachute systems.

This proposed section is based on current section 105.43(a) and proposes one change. This section currently provides that only a certificated parachute rigger, or the person making the parachute jump with that parachute, may pack a main parachute. The FAA proposes that a main parachute also may be packed by a person under the direct supervision of a certificated parachute rigger.

Section 105.45 Use of tandem parachute systems.

This proposed section provides for tandem parachute operations, and would incorporate the conditions and limitations, with some modification, set forth in the grants of exemption issued to experimental tandem parachute operators. These conditions and limitations include instructor experience requirements, briefings for passenger parachutists, equipment inspections, and packing requirements. Because the FAA no longer refers to passenger parachutists as students, those persons would be referred to as "passenger parachutists," and tandem instructors would be referred to as "parachutists in command."

In addition, the FAA proposes that a certificated parachute rigger supervise persons packing parachutes who are not certificated under part 65, unless the person packing the parachute is a parachutist in command.

Section 105.47 Use of static lines.

This proposed section is based on the current section 105.43(b) and contains only one proposed change, which is that the use of assist devices with ram-air parachutes would no longer be required.

Section 105.49 Foreign parachutists and equipment.

This proposed section addresses equipment and packing requirements for foreign parachutists. Only single-harness, dual-parachute systems which contain a non-Technical Standard Order (TSO) reserve parachute or non-TSO'd harness and container

would be allowed to be used in the United States by the owner or agent of that equipment. The parachute system used by the foreign parachutist must also meet the civil aviation authority requirements of the foreign parachutist's country, and must be packed by the foreign parachutist making the next parachute jump with that parachute, or a U.S. certificated parachute rigger.

Section 119.1 Applicability.

The FAA proposes to amend paragraph (e)(6) of this section to read, "Nonstop flights conducted within a 25-statute-mile radius of the airport of takeoff carrying persons or objects for the purpose of conducting intentional parachute operations." This change adds the term, "objects" to the current rule.

Paperwork Reduction Act

This NPRM, Parachute Operations, contains information collection requirements. As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), the FAA has submitted a copy of these proposed sections to the Office of Management and Budget (OMB) for its review.

At the present time, there is no requirement to notify the FAA of a parachute accident. Without this requirement, the FAA has been unable to provide adequate oversight of parachute riggers and the packing of parachutes, which have been found to be contributing factors in parachute accidents.

The information collected would be used by the FAA to propose recommendations for equipment changes, operating

procedures, and/or training. In addition, the information would be used to assist in the investigation of accidents, and would help determine whether the packing, materials, or competency of the packer was a contributing factor in the accidents.

Since this reporting requirement would be used to account for the total number of parachutists who sustain serious or fatal injuries, the FAA expects this proposed rule would affect approximately 44 drop zone owners, parachutists, or pilots of aircraft used in parachute operations per year. This recordkeeping requirement would be used to improve the FAA's existing accident database. This data would be used to assess the safety of parachute operations and prevent future accidents. Accordingly, it is estimated that the approximate 44 drop zone owners, parachutists, or pilots of aircraft used in parachute operations would spend an average of one hour collecting the data at an hourly rate of \$12 per hour (44 reports x 1 hr = 44 hrs x \$12 = \$528.00).

Individuals and organizations may submit comments on the information collection requirement by June 14, 1999, and should direct them to the address listed in the **ADDRESSES** section of this document.

Persons are not required to respond to a collection of information unless it displays a currently valid OMB control number. The burden associated with this proposal has been submitted to OMB for review. The FAA will publish a notice in

the Federal Register notifying the public of the approval numbers and expiration date.

International Compatibility

The FAA has reviewed corresponding International Civil Aviation Organization international standards and recommended practices and Joint Aviation Authorities requirements and has identified no differences in these proposed amendments and the foreign regulations.

Regulatory Evaluation Summary

Three principal requirements pertain to the economic impact of changes to the Federal Regulations. First, Executive Order 12866 directs Federal agencies to promulgate new regulations or modify existing regulations only upon reasoned determination that the benefit of the intended regulation justifies its costs. Second, the Regulatory Flexibility Act of 1980 (RFA) requires agencies to analyze the economic impact of regulatory changes on small entities. Finally, the Office of Management and Budget directs agencies to assess the effects of regulatory changes on international trade. In conducting these analyses, the FAA has determined that this rule (1) would generate cost-savings that would exceed any costs; (2) is not "significant" as defined in the Executive Order and DOT policies and procedures; (3) would not have a significant impact on a substantial number of small

entities; and (4) would not impose restraints on international trade. These analyses, available in the docket, are summarized below.

The FAA has determined that there would be little or no cost associated with the proposed revision of part 105 as described in this notice. The benefits of such revision would be to reduce the likelihood of midair collision involving aircraft and persons engaged in parachute operations, and reduce the risk of aircraft coming in close proximity to the parachutists who were descending to the ground after exiting the aircraft near an airport or within controlled airspace.

The proposed rule would reorganize and revise the rules applicable to parachute operations. It would clarify some sections and permit certain operations currently allowed under exemptions granted by the FAA. The proposal also would harmonize the three following proposed sections with annex 2 of ICAO: (1) the radio equipment and use requirements in proposed section 105.9; (2) the requirement in proposed section 105.19 that parachutists and objects dropped from aircraft display a light when conducting jumps or drops after sunset; and (3) the requirements listed in section 105.49 pertaining to foreign parachutists and equipment. The proposed changes to part 105 would pose little or no cost to parachutists, sky diving training schools, and certificated parachute riggers. In addition,

because the requirements of the proposed sections for tandem parachute operations and parachute jumps by foreign parachutists already are being met under exemptions granted by the FAA, the proposal would not impose additional business expenses on sky diving schools. Costs imposed on the FAA are minimal as well because the agency would not need to provide additional oversight of parachute operations under the revision of part 105.

Initial Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) establishes "as principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." To achieve that principal, the Act requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The Act covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule would have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis (RFA).

However, if an agency determines that a proposed rule is not

expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 act provides that the head of the agency may so certify and an RFA is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The FAA conducted the required review of this proposal and determined that it would not have a significant economic impact on a substantial number of small entities. Accordingly, pursuant to the Regulatory Flexibility Act, 5 U.S.C. 605 (b), the FAA certifies that this rule would not have a significant economic impact on a substantial number of small entities for the following reason: the proposed rule would require an additional expense of less than \$1,000 per entity (parachute lofts and clubs, sky diving training schools, and certificated riggers) in excess of normal business expenses. Major aspects of this rulemaking such as permitting tandem parachute operations would not impose additional business expenses for compliance on sky diving schools and parachute lofts because these entities currently adhere to the requirements of the proposed rule through grants of exemptions issued by the FAA under part 105. The FAA solicits comments from affected entities with respect to this finding and determination.

International Trade Impact Analysis

The FAA has determined that the proposed rule would promote parachuting by foreign jumpers in the United States. This determination is based on the FAA's contention that the proposed rule would harmonize U.S. standards for parachute operations with the ICAO standards for parachute operations.

Federalism Implications

The regulations proposed herein will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have significant federalism implications to warrant the preparation of a Federalism Assessment.

Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (the Act), enacted as Public Law 104-4 on March 22, 1995, requires each Federal agency, to the extent permitted by law, to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency rule that may result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more (adjusted annually for inflation) in any 1 year. Section 204(a) of the Act, 2 U.S.C. 1534(a), requires the Federal agency to develop an

effective process to permit timely input by elected officers (or their designees) of State, local, and tribal governments on a proposed "significant intergovernmental mandate." A "significant intergovernmental mandate" under the Act is any provision in a Federal agency regulation that would impose an enforceable duty upon State, local, and tribal governments, in the aggregate, of \$100 million (adjusted annually for inflation) in any 1 year. Section 203 of the Act, 2 U.S.C. 1533, which supplements section 204(a), provides that before establishing any regulatory requirements that might significantly or uniquely affect small governments, the agency shall have developed a plan that, among other things, provides for notice to potentially affected small governments, if any, and for a meaningful and timely opportunity to provide input in the development of regulatory proposals.

This rule does not contain a Federal intergovernmental or private sector mandate that exceeds \$100 million a year, therefore, the requirements of the act do not apply.

Distribution and Derivation Tables

The following distribution table is provided to illustrate how the current regulation would relate to the revised part 105, and the derivation table identifies how the revised part 105 would relate to the current rule.

DISTRIBUTION TABLE

Old Section	New Section(s)
105.1	105.1
105.11	105.1
105.13	105.5
105.14	105.13
105.15	105.21
105.17	105.23
105.19	105.25
105.23	105.25
105.25	105.15
105.27	105.25
105.33	105.19
105.35	105.7
105.37	105.9
105.41	105.41
105.43	105.43 and 105.47

DERIVATION TABLE

New Section	Old Section(s)
105.1	105.1 and 105.11
105.3	New
105.5	105.13
105.7	105.35
105.9	105.37
105.13	105.14
105.15	105.25
105.17	105.29
105.19	105.33
105.21	105.15
105.23	105.17
105.25.....	105.19, 105.23, and 105.27
105.27.....	New
105.41	105.41
105.43	105.43
105.45	New
105.47	105.43
105.49	New

List of Subjects

14 CFR Part 65

Air traffic controllers, Aircraft, Airmen, Airports, Alcohol abuse, Drug abuse, Reporting and recordkeeping requirements.

14 CFR Part 91

Afghanistan, Agriculture, Air traffic control, Aircraft, Airmen, Airports, Aviation safety, Canada, Cuba, Freight, Mexico, Noise control, Political candidates, Reporting and recordkeeping requirements, Yugoslavia.

14 CFR Part 105

Aircraft, Aviation safety, Recreation and recreation areas, Reporting and recordkeeping requirements.

14 CFR Part 119

Administrative practice and procedure, Air carriers, Aircraft, Aviation Safety, Charter flights, Reporting and recordkeeping requirements.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend parts 65, 91, 105, and 119 of Title 14, Code of Federal Regulations as follows:

PART 65 — CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS

1. The authority citation for part 65 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701-44703, 44707, 44709-44711, 45102-45103, 45301-45302.

2. Section 65.111 is amended by revising paragraphs (a) and (b) to read as follows:

§ 65.111 Certificate required.

(a) No person may pack, maintain, or alter any personnel-carrying parachute intended for emergency use in connection with civil aircraft of the United States (including the reserve parachute of a dual parachute system to be used for intentional parachute jumping) unless that person holds an appropriate current certificate and type rating issued under this subpart and complies with §§65.127 through 65.133.

(b) No person may pack, maintain, or alter any main parachute of a dual-parachute system to be used for intentional parachute jumping in connection with civil aircraft of the United States unless that person—

(1) Has an appropriate current certificate issued under this subpart;

(2) Is under the supervision of a current certificated parachute rigger;

(3) Is the person making the next parachute jump with that parachute in accordance with section 105.43(a) of this chapter; or

(4) Is the parachutist in command making the next parachute jump with that parachute in a tandem parachute operation conducted under section 105.45(b)(1) of this chapter.

* * * * *

3. Section 65.125 is amended by revising paragraphs (a)(2) and (b)(2) to read as follows:

§ 65.125 Certificates: Privileges.

(a) * * *

(2) Supervise other persons in packing any type of parachute for which that person is rated in accordance with section 105.43(a) or section 105.45(b)(1) of this chapter.

(b) * * *

(2) Supervise other persons in packing, maintaining, or altering any type of parachute for which the certificated parachute rigger is rated in accordance with section 105.43(a) or section 105.45(b)(1) of this chapter.

* * * * *

PART 91 — GENERAL OPERATING AND FLIGHT RULES

4. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506-46507, 47122, 47508, 47528-47531, articles 12 and 29 of the Convention on International Civil Aviation (61 stat. 1180).

5. Section 91.307 is amended by revising paragraph (b) to read as follows:

§ 91.307 Parachutes and parachuting.

* * * * *

(b) Except in an emergency, no pilot in command may allow, and no person may conduct, a parachute operation from an aircraft within the United States except in accordance with part 105 of this chapter.

* * * * *

6. Part 105 is revised to read as follows:

PART 105 — PARACHUTE OPERATIONS

Subpart A — General

Sec.

105.1 Applicability.

105.3 Definitions.

105.5 General.

105.7 Use of alcohol and drugs.

105.9 Inspections.

Subpart B — Operating rules

105.13 Radio equipment and use requirements.

105.15 Information required and notice of cancellation or postponement of a parachute operation.

105.17 Flight visibility and clearance from cloud requirements.

105.19 Parachute operations between sunset and sunrise.

105.21 Parachute operations over or into congested areas or an open-air assembly of persons.

105.23 Parachute operations over or onto airports.

105.25 Parachute operations in designated airspace.

105.27 Accident reporting requirements.

Subpart C – Parachute Equipment and Packing

105.41 Applicability.

105.43 Use of single-harness, dual-parachute systems.

105.45 Use of tandem parachute systems.

105.47 Use of static lines.

105.49 Foreign parachutists and equipment.

Authority: 49 U.S.C. 106(g), 40113-40114, 44701-44702, 44721.

Subpart A – General

§ 105.1 Applicability.

(a) Except as provided in paragraphs (b) and (c) of this section, this part prescribes rules governing parachute operations conducted in the United States.

(b) This part does not apply to a parachute operation conducted—

(1) In response to an in-flight emergency, or

(2) To meet an emergency on the surface when it is conducted at the direction or with the approval of an agency of the United States, or of a State, Puerto Rico, the District of

Columbia, or a possession of the United States, or an agency or political subdivision thereof.

(c) Sections 105.5, 105.9, 105.13, 105.15, 105.17, 105.19 through 105.23, 105.25(a)(1) and 105.27 of this part do not apply to a parachute operation conducted by a member of an Armed Force—

(1) Over or within a restricted area when that area is under the control of an Armed Force.

(2) During military operations in uncontrolled airspace.

§ 105.3 Definitions.

For the purposes of this part—

Approved parachute means a parachute manufactured under a type certificate or a Technical Standard Order (C-23 series), or a personnel-carrying military parachute (other than a high altitude, high speed, or ejection type) identified by a Navy Air Facility, an Army Air Field, an Air Force-Navy drawing number, an Army Air Field order number, or any other military designation or specification number.

Automatic Activation Device means a self-contained mechanical device attached to a parachute, other than a static line, which automatically initiates parachute deployment at a preset altitude, time, percentage of terminal velocity, or combination thereof if that parachute has not been manually activated.

Drop zone means any pre-determined area upon which parachutists or objects land after making an intentional parachute jump. The center-point target of a drop zone is expressed in nautical miles from the nearest VOR facility when 30 nautical miles or less; or from the nearest airport, town, or city depicted on the appropriate Coast and Geodetic Survey World Aeronautical Chart or Sectional Aeronautical Chart, when the nearest VOR facility is more than 30 nautical miles from the drop zone.

Fatal injury means any parachuting injury that results in death within 30 days from the date of the injury.

Foreign parachutist means a parachutist who is neither a U.S. citizen nor a resident alien.

Freefall means the portion of a parachute jump or drop between aircraft exit and parachute deployment in which the parachute is activated manually by the parachutist at the parachutist's discretion or automatically, or, in the case of an object, is activated automatically.

Main parachute means a parachute worn as the primary parachute used or intended to be used in conjunction with a reserve parachute.

Object means any item other than a person that descends to the surface from an aircraft in flight when a parachute is used or is intended to be used during all or part of the descent.

Parachute drop means a parachute operation that involves the descent of an object to the surface from an aircraft in flight when a parachute is used or intended to be used during all or part of that descent.

Parachute jump means a parachute operation that involves the descent of one or more persons to the surface from an aircraft in flight when a parachute is used or intended to be used during all or part of that descent.

Parachute operation means any activity that includes a parachute jump or a parachute drop. This activity involves, but is not limited to, the following persons: parachutist, tandem parachute operation, drop zone owner or operator, certificated parachute rigger, pilot, or appropriate FAA personnel.

Parachutist means a person who boards an aircraft with the intent to exit the aircraft while in-flight using a single-harness, dual parachute system to descend to the surface.

Parachutist in command means the person responsible for the operation and safety of a tandem parachute operation before, during, and after a tandem parachute operation.

Passenger parachutist means a person who boards an aircraft, acting as other than the parachutist in command of a tandem parachute operation, with the intent of exiting the aircraft while in-flight using the forward harness of a dual harness tandem parachute system to descend to the surface.

Pilot chute means a small parachute used to initiate and/or accelerate deployment of a main or reserve parachute.

Ram-air parachute means a parachute with a canopy consisting of an upper and lower surface that is inflated by ram air entering through specially designed openings in the front of the canopy to form a gliding airfoil.

Reserve parachute means an approved parachute worn for emergency use to be activated only upon failure of the main parachute or in any other emergency where use of the main parachute is impractical or use of the main parachute would increase risk.

Serious injury means any injury that requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; results in a fracture of any bone (except simple fractures of fingers, toes, or the nose); causes severe hemorrhages, or nerve, muscle, or tendon damage; or involves any internal organ.

Single-harness, dual parachute system means the combination of a main parachute, approved reserve parachute, and approved single person harness and dual-parachute container. This parachute system may have an operational automatic activation device installed.

Supervision means that a certificated rigger personally observes a noncertificated person packing a main parachute to the extent necessary to ensure that it is being done properly.

Tandem parachute operation means a parachute operation in which more than one person simultaneously uses the same tandem parachute system while descending to the surface from an aircraft in flight.

Tandem parachute system means the combination of a main parachute, approved reserve parachute, and approved harness and dual parachute container, and a separate approved forward harness for a passenger parachutist. This parachute system must have an operational automatic activation device installed.

§ 105.5 General.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from an aircraft, if that operation creates a hazard to air traffic or to persons or property on the surface.

§ 105.7 Use of alcohol and drugs.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a person to conduct a parachute operation from that aircraft, if that person is or appears to be under the influence of—

- (a) Alcohol, or
- (b) Any drug that affects that person's faculties in any way contrary to safety.

§ 105.9 Inspections.

The Administrator may inspect, any parachute operation to which this part applies (including inspections at the site where

the parachute operation is being conducted) to determine compliance with the regulations of this part.

Subpart B — Operating Rules

§ 105.13 Radio equipment and use requirements.

(a) Except when otherwise authorized by air traffic control—

(1) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, in or into controlled airspace unless, during that flight—

(i) The aircraft is equipped with a functioning two-way radio communications system appropriate to the air traffic control facilities being used; and

(ii) Radio communications have been established between the aircraft and the air traffic control facility having jurisdiction over the affected airspace at least 5 minutes before the parachute operation begins. The pilot in command and the parachutists on that flight must have established radio communications to receive information regarding air traffic activity in the vicinity of the parachute operation.

(2) The pilot in command of an aircraft used for any parachute operation in or into controlled airspace must, during each flight—

(i) Continuously monitor the appropriate frequency of the aircraft's radio communications system from the time radio

communications are first established between the aircraft and air traffic control, until the pilot advises air traffic control that the parachute operation has ended for that flight; and

(ii) Advise air traffic control when the last parachutist or object leaves the aircraft.

(b) If, prior to receipt of a required air traffic control authorization, or during any parachute operation in or into controlled airspace the required radio communications system is or becomes inoperative, any parachute operation from the aircraft must be aborted.

§ 105.15 Information required and notice of cancellation or postponement of a parachute operation.

(a) Each person requesting an authorization under sections 105.21(b) and 105.25(a)(2) of this part and each person submitting a notification under section 105.25(a)(3) of this part must include the following information (on an individual or group basis) in that request or notice:

(1) The date and time the parachute operation will begin.

(2) The radius of the drop zone around the target expressed in nautical miles.

(3) The location of the center of the drop zone in relation to—

(i) The nearest VOR facility in terms of the VOR radial on which it is located and its distance in nautical miles from the

VOR facility when that facility is 30 nautical miles or less from the drop zone target; or

(ii) The nearest airport, town, or city depicted on the appropriate Coast and Geodetic Survey World Aeronautical Chart or Sectional Aeronautical Chart, when the nearest VOR facility is more than 30 nautical miles from the drop zone target.

(4) Each altitude above mean sea level at which the aircraft will be operated when parachutists or objects exit the aircraft.

(5) The duration of the intended parachute operation.

(6) The name, address, and telephone number of the person who requests the authorization or gives notice of the parachute operation.

(7) The registration number of the aircraft to be used.

(8) The radio frequencies appropriate to the air traffic control facilities to be used, if required.

(b) Each holder of a certificate of authorization issued under sections 105.21(b) and 105.25(b) of this part must present that certificate for inspection upon the request of the Administrator or any Federal, State, or local official.

(c) Each person requesting an authorization under sections 105.21(b) and 105.25(a)(2) of this part and each person submitting a notice under section 105.25(a)(3) of this part must promptly notify the air traffic control facility having

jurisdiction over the affected airspace if the proposed or scheduled parachute operation is canceled or postponed.

§ 105.17 Flight visibility and clearance from cloud requirements.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft—

(a) Into or through a cloud, or

(b) When the flight visibility or the distance from any cloud is less than that prescribed in the following table:

Altitude	Flight Visibility (statute miles)	Distance from Clouds
1,200 feet or less above the surface regardless of the MSL altitude	3	500 feet below 1,000 feet above 2,000 feet horizontal
More than 1,200 feet above the surface but less than 10,000 feet MSL	3	500 feet below 1,000 feet above 2,000 feet horizontal
More than 1,200 feet above the surface and at or above	5	1,000 feet below 1,000 feet above 1 mile horizontal

10,000 feet MSL		
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§ 105.19 Parachute operations between sunset and sunrise.

(a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a person to conduct a parachute operation from an aircraft between sunset and sunrise, unless the person or object descending from the aircraft displays a light that is visible for at least 3 statute miles in all directions.

(b) Each person conducting a parachute drop between sunset and sunrise must ensure that the light required by paragraph (a) of this section is displayed from the time that the object or parachutist exits the aircraft until the object or parachutist reaches the surface.

§ 105.21 Parachute operations over or into a congested area or an open-air assembly of persons.

(a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, over or into a congested area of a city, town, or settlement, or an open-air assembly of persons unless a certificate of authorization for that parachute operation has been issued under this section. However, a parachutist may drift over a congested area or an open-air assembly of persons with a fully deployed and properly

functioning parachute if that parachutist is at a sufficient altitude to avoid creating a hazard to persons or property on the surface.

(b) An application for a certificate of authorization issued under this section must—

(1) Be made to the local FSDO in a form and in a manner prescribed by the Administrator, and

(2) Contain the information in section 105.15(a) of this part.

§ 105.23 Parachute operations over or onto airports.

No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft, over or onto any airport unless—

(a) For airports with an operating control tower:

(1) Prior approval has been obtained from the management of the airport to conduct parachute operations over or onto that airport.

(2) Approval has been obtained from the control tower to conduct parachute operations over or onto that airport.

(3) Two-way radio communications are maintained between the pilot of the aircraft involved in the parachute operation and the control tower of the airport over or onto which the parachute operation is being conducted.

(b) For airports without an operating control tower, prior approval has been obtained from the management of the airport to conduct parachute operations over or onto that airport.

(c) A parachutist may drift over that airport with a fully deployed and properly functioning parachute if he is at least 2,000 feet above that airport's traffic pattern, and avoids creating a hazard to air traffic or to persons and property on the ground.

§ 105.25 Parachute operations in designated airspace.

(a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft—

(1) Over or within a restricted area or prohibited area unless the controlling agency of the area concerned has authorized that parachute operation;

(2) Within or into Class A, B, C, or D airspace area without, or in violation of the terms of, an air traffic control authorization issued under this section;

(3) Except as provided in paragraph (c) and (d) of this section, within or into Class E or G airspace area unless the air traffic control facility having jurisdiction over the affected airspace is notified of the parachute operation no earlier than 24 hours before or no later than 1 hour before the parachute operation begins.

(b) Each request for a parachute operation authorization or notification required under this section must be submitted to the air traffic control facility having jurisdiction over the affected airspace and must include the information prescribed by section 105.15(a) of this part.

(c) For the purposes of paragraph (a)(3) of this section, air traffic control may accept a written notification from an organization that conducts parachute operations and lists the scheduled series of parachute operations to be conducted over a stated period of time not longer than 12 calendar months. The notification must contain the information prescribed by section 105.15(a) of this part, identify the responsible persons associated with that parachute operation, and be submitted at least 15 days, but not more than 30 days, before the parachute operation begins. Air traffic control may revoke the acceptance of the notification for any failure of the organization conducting the parachute operations to comply with its terms.

(d) Paragraph (a)(3) of this section does not apply to a parachute operation conducted by a member of an Armed Force within a restricted area that extends upward from the surface when that area is under the control of an Armed Force.

§ 105.27 Accident reporting requirements.

The FAA must be notified within 48 hours of any parachute operation resulting in a serious or fatal injury to a parachutist by—

- (a) Each parachutist involved in the accident, or
- (b) the pilot of the aircraft, or
- (c) or the drop zone owner or operator.

Subpart C – Parachute Equipment and Packing

§ 105.41 Applicability.

This subpart prescribes rules governing parachute equipment used in civil parachute operations.

§ 105.43 Use of single-harness, dual-parachute systems.

No person may conduct a parachute operation using a single-harness, dual-parachute system, and no pilot in command of an aircraft may allow any person to conduct a parachute operation from that aircraft using a single-harness, dual-parachute system, unless that system has at least one main parachute, one approved reserve parachute, and one approved single person harness and container that are packed as follows:

(a) The main parachute must have been packed within 120 days before the date of its use by a certificated parachute rigger, the person making the next jump with that parachute, or a non-certificated person under the direct supervision of a certificated parachute rigger.

(b) The reserve parachute must have been packed by a certificated parachute rigger—

(1) Within 120 days before the date of its use, if its canopy, shroud, and harness are composed exclusively of nylon,

rayon, or similar synthetic fiber or material that is substantially resistant to damage from mold, mildew, or other fungi, and other rotting agents propagated in a moist environment; or

(2) Within 60 days before the date of its use, if it is composed of any amount of silk, pongee, or other natural fiber, or material not specified in paragraph (b)(1) of this section.

(3) If installed, the automatic activation device must be maintained in accordance with manufacturer instructions for that automatic activation device.

§ 105.45 Use of tandem parachute systems.

(a) No person may conduct a parachute operation using a tandem parachute system, and no pilot in command of an aircraft may allow any person to conduct a parachute operation from that aircraft using a tandem parachute system, unless—

(1) One of the parachutists using the tandem parachute system is the parachutist in command, and meets the following requirements:

(i) Has a minimum of 3 years of experience in parachuting, and must provide documentation that the parachutist

(ii) Has completed a minimum of 500 freefall parachute jumps, at least 300 of which were completed using a ram-air parachute, and

(iii) Holds an expert parachute license issued by an organization recognized by the FAA, and

(iv) Has successfully completed a tandem instructor course given by the manufacturer of the tandem parachute equipment used in the parachute operation or a course acceptable to the Administrator.

(v) Has been certified by the appropriate parachute manufacturer or tandem course provider as being properly trained on the use of the specific tandem parachute system to be used.

(2) The person acting as parachutist in command:

(i) Has briefed the passenger parachutist before boarding the aircraft. The briefing must include the procedures to be used in case of an emergency with the aircraft or after exiting the aircraft, while preparing to exit and exiting the aircraft, freefall, operating the parachute after freefall, landing approach, and landing.

(ii) Uses the harness position prescribed by the manufacturer of the tandem parachute equipment.

(b) No person may make a parachute jump with a tandem parachute system unless—

(1) The main parachute has been packed by a certificated parachute rigger, the parachutist in command making the next jump with that parachute, or a person under the direct supervision of a certificated parachute rigger.

(2) The reserve parachute has been packed by a certificated parachute rigger in accordance with section 105.43(b) of this part.

(3) The tandem parachute system contains an operational automatic activation device for the reserve parachute, approved by the manufacturer of that tandem parachute system.

(i) The automatic activation device must be maintained in accordance with manufacturer instructions for that automatic activation device.

(ii) [Reserved.]

(4) The passenger parachutist is provided with a manual main parachute activation device and instructed on the use of that device, if required by the owner/operator.

(5) The main parachute is equipped with a single-point release system.

(6) The reserve parachute meets Technical Standard Order C23 specifications.

§ 105.47 Use of static lines.

(a) Except as provided in paragraph (c) of this section, no person may conduct a parachute operation using a static line attached to the aircraft and the main parachute unless an assist device, described and attached as follows, is used to aid the pilot chute in performing its function, or, if no pilot chute is used, to aid in the direct deployment of the main parachute canopy. The assist device must—

(1) Be long enough to allow the main parachute container to open before a load is placed on the device.

(2) Have a static load strength of—

(i) At least 28 pounds but not more than 160 pounds if it is used to aid the pilot chute in performing its function; or

(ii) At least 56 pounds but not more than 320 pounds if it is used to aid in the direct deployment of the main parachute canopy; and

(3) Be attached as follows:

(i) At one end, to the static line above the static-line pins or, if static-line pins are not used, above the static-line ties to the parachute cone.

(ii) At the other end, to the pilot chute apex, bridle cord, or bridle loop, or, if no pilot chute is used, to the main parachute canopy.

(b) No person may attach an assist device required by paragraph (a) of this section to any main parachute unless that person is a certificated parachute rigger or that person makes the next parachute jump with that parachute.

(c) An assist device is not required for parachute operations using direct-deployed, ram-air parachutes.

§ 105.49 Foreign parachutists and equipment.

(a) No person may conduct a parachute operation, and no pilot in command of an aircraft may allow a parachute operation to be conducted from that aircraft with a non-TSO'd foreign parachute system unless-

(1) The parachute system is worn by a foreign parachutist who is the owner or agent of that system.

(2) The parachute system is of a single harness dual parachute type.

(3) The parachute system meets the civil aviation authority requirements of the foreign parachutists country.

(4) All foreign non-TSO'd parachutes deployed by a foreign parachutist during a parachute operation conducted under this section shall be packed as follows-

(a) The main parachute must be packed by the foreign parachutist making the next parachute jump with that parachute, or a certificated parachute rigger.

(b) The reserve parachute must be packed in accordance with the foreign parachutists civil aviation authority requirements, by a certificated parachute rigger, or any other person acceptable to the administrator.

PART 119 – CERTIFICATION: AIR CARRIERS AND COMMERCIAL OPERATORS

7. The authority citation for part 119 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1153, 40101, 40102, 40103, 44105, 44106, 44111, 44701-44717, 44722, 44901, 44903, 44904, 44906, 44912, 44914, 44936, 44938, 46103, 46105.

8. Section 119.1 is amended by revising paragraph (e)(6) to read as follows:

§ 119.1 Applicability.

* * * * *

(e) * * *

(6) Nonstop flights conducted within a 25-statute-mile radius of the airport of takeoff carrying persons or objects for the purpose of conducting intentional parachute operations.

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Richard V. Powell,

Acting Program Director, Air Traffic Airspace Management Program.

L. Nicholas Lacey,

Director, Flight Standards Service.